



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/982,259      | 10/17/2001  | Bo Qiu               | Cenogenics          | 8229             |

7590 01/03/2002

UMDNJ Office of Patents & Licensing  
335 George Street  
Suite 3200  
New Brunswick, NJ 08901

[REDACTED] EXAMINER

SWARTZ, RODNEY P

[REDACTED] ART UNIT [REDACTED] PAPER NUMBER

1645

DATE MAILED: 01/03/2002

5

Please find below and/or attached an Office communication concerning this application or proceeding.

|   |  |  |   |
|---|--|--|---|
| <b>Office Action Summary</b>  | Application No.<br><b>09/982,259</b>       | Applicant(s)<br><b>Qiu et al</b>   |  |
|   | Examiner<br><b>Rodney P. Swartz, Ph.D.</b> | Art Unit<br><b>1645</b>  |   |
| <i>-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --</i>  |  |  |   |
| <b>Period for Reply</b>   |  |  |   |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>1</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  |  |  |   |
| - Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.   |  |  |   |
| - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  |  |  |   |
| - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  |  |  |   |
| - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).   |  |  |   |
| - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).   |  |  |   |
| <b>Status</b>   |  |  |   |
| 1) <input type="checkbox"/> Responsive to communication(s) filed on _____.  |  |  |   |
| 2a) <input type="checkbox"/> This action is <b>FINAL</b> .  |  | 2b) <input checked="" type="checkbox"/> This action is non-final.            |   |
| 3) <input type="checkbox"/> Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11; 453 O.G. 213.   |  |  |   |
| <b>Disposition of Claims</b>  |  |  |   |
| 4) <input checked="" type="checkbox"/> Claim(s) <u>1-45</u> is/are pending in the application.  |  |  |   |
| 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.   |  |  |   |
| 5) <input type="checkbox"/> Claim(s) _____ is/are allowed.  |  |  |   |
| 6) <input type="checkbox"/> Claim(s) _____ is/are rejected.   |  |  |   |
| 7) <input type="checkbox"/> Claim(s) _____ is/are objected to.  |  |  |   |
| 8) <input checked="" type="checkbox"/> Claims <u>1-45</u> are subject to restriction and/or election requirement.   |  |  |   |
| <b>Application Papers</b>   |  |  |   |
| 9) <input type="checkbox"/> The specification is objected to by the Examiner.   |  |  |   |
| 10) <input type="checkbox"/> The drawing(s) filed on _____ is/are objected to by the Examiner.  |  |  |   |
| 11) <input type="checkbox"/> The proposed drawing correction filed on _____ is: a) <input type="checkbox"/> approved b) <input type="checkbox"/> disapproved.   |  |  |   |
| 12) <input type="checkbox"/> The oath or declaration is objected to by the Examiner.  |  |  |   |
| <b>Priority under 35 U.S.C. § 119</b>   |  |  |   |
| 13) <input type="checkbox"/> Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).  |  |  |   |
| a) <input type="checkbox"/> All b) <input type="checkbox"/> Some* c) <input type="checkbox"/> None of:<br>1. <input type="checkbox"/> Certified copies of the priority documents have been received.<br>2. <input type="checkbox"/> Certified copies of the priority documents have been received in Application No. _____.<br>3. <input type="checkbox"/> Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). |  |  |   |
| *See the attached detailed Office action for a list of the certified copies not received.   |  |  |   |
| 14) <input type="checkbox"/> Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).   |  |  |   |
| <b>Attachment(s)</b>  |  |  |   |
| 15) <input type="checkbox"/> Notice of References Cited (PTO-892)   |  | 18) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |   |
| 16) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   |  | 19) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |   |
| 17) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____  |  | 20) <input checked="" type="checkbox"/> Other: <b>Sequence requirement</b>   |   |

Art Unit: 1645

## **DETAILED ACTION**

### **Sequence Requirements**

1. This application contains sequence disclosures that are encompassed by the definitions for nucleotide and/or amino acid sequences set forth in 37 C.F.R. §1.821(a)(1) and (a)(2).

However, this application fails to comply with the requirements of 37 C.F.R. §§1.821-1.825 for the reason(s) set forth on the attached Notice to Comply With Requirements For Patent Applications Containing Nucleotide Sequence And/Or Amino Acid Sequence Disclosures.

Compliance with the sequence rules is required in response to this office action.

Failure to comply with the sequence rules in response to this office action will be considered nonresponsive. Sequence compliance should accompany the response to restriction set forth below.

2. Claims 1-45 are drawn to a plurality of disclosed patentably distinct polypeptides and nucleic acids comprising materially different amino acid sequences or materially different nucleic acids. The separate polypeptides and nucleic acids bear distinct structural or biochemical properties as evidenced by the separate sequences. **Therefore, each disclosed patentably distinct polypeptide and nucleic acid is considered a separate invention.**

Should applicant traverse on the ground that the inventions are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing which inventions are obvious variants of each other or clearly admit on the record which inventions are obvious variants of each other. If the inventions are deemed obvious variants of each other, then

Art Unit: 1645

if the examiner finds one of the inventions unpatentable over the prior art, the evidence submitted by applicant or admission of record by applicant may be used in a rejection under 35 U.S.C. §103(a) of the other inventions.

**Election/Restriction**

3. Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1, 2, 3, 16, 17, and 18, drawn to polypeptide VQEGVQQEGAQQP- (beta-A)(beta-,4)C, classified in class 424, subclass 190.1.
- II. Claims 1, 4, 5, 16, 19, and 20, drawn to polypeptide EIAAKAIGKKIHQNNNG- (beta-A)(beta-A)C, classified in class 424, subclass 190.1 .
- III. Claims 1, 6, 7, 21, and 22, drawn to polypeptide ISTLIKQKLDGLKNE-(beta-A)(beta-A)C, classified in class 424, subclass 190.1.
- IV. Claims 1, 8, 9, 16, 23, and 24, drawn to polypeptide PWAESPKKPE- (beta-A)(beta-A)C, classified in class 424, subclass 190.1.
- V. Claims 1, 10, 11, 16, 25, and 26, drawn to polypeptide DKKAINLDKAQQKLD- (beta-A)(beta-A)C, classified in class 424, subclass 190.1.
- VI. Claims 1, 12, 13, 16, 27, and 28, drawn to polypeptide ITKGKSQKSLGD-(beta-A)(beta-A)C, classified in class 424, subclass 190.1.
- VII. Claims 1, 14, 15, 16, 29, and 30, drawn to polypeptide GMTFRAQEGAFLTG- (beta-A)(beta-A)C, classified in class 424, subclass 190.1.

Art Unit: 1645

VIII. Claims 31, 32, and 33, drawn to nucleic acid encoding polypeptide  
VQEGVQQEGAQQP- (beta-A)(beta-,4)C, classified in class 536, subclass 23.7.

IX. Claims 31, 34, and 35, drawn to nucleic acid encoding polypeptide  
EIAAKAIGKKIHQNNG- (beta-A)(beta-A)C, classified in class 536, subclass  
23.7.

X. Claims 31, 36, and 37, drawn to nucleic acid encoding polypeptide  
ISTLIKQKLDGLKNE-(beta-A)(beta-A)C, classified in class 536, subclass 23.7.

XI. Claims 31, 38, and 39, drawn to nucleic acid encoding polypeptide  
PWAESPKKPE- (beta-A)(beta-A)C, classified in class 536, subclass 23.7.

XII. Claims 31, 40, and 41, drawn to nucleic acid encoding polypeptide  
DKKAINLDKAQQKLD-(beta-A)(beta-A)C, classified in class 536, subclass  
23.7.

XIII. Claims 31, 42, and 43, drawn to nucleic acid encoding polypeptide  
ITKGKSQKSLGD-(beta-A)(beta-A)C, classified in class 536, subclass 23.7.

XIV. Claims 31, 44, and 45, drawn to nucleic acid encoding polypeptide  
GMTFRAQEGAFLTG-(beta-A)(beta-A)C, classified in class 536, subclass 23.7.

The inventions are distinct, each from the other because of the following reasons:

Inventions 1-7 are drawn to structurally and functionally distinct amino acid sequences.

Invention 8-14 are drawn to structurally and functionally distinct nucleic acid sequences.

Art Unit: 1645

Because these inventions are distinct for the reasons given above, have acquired a separate status in the art as shown by their different classification, and because while the searches may overlap, the searches are not coextensive, restriction for examination purposes as indicated is proper.

4. Applicants are advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicants are reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rodney P. Swartz, Ph.D., whose telephone number is (703) 308-4244. The examiner can normally be reached on Monday through Thursday from 5:30 AM to 4:00 PM EST.

If attempts to reach the Examiner by telephone are unsuccessful, the examiner's supervisor, Lynette F. Smith, can be reached on (703)308-3909. The facsimile telephone number for the Art Unit Group is (703)308-4242.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the group receptionist whose telephone number is (703)308-0196.

Application/Control Number: 09/982,259

Page 6

Art Unit: 1645

*Rodney P Swartz*  
RODNEY P SWARTZ, PH.D  
PRIMARY EXAMINER  
Art Unit 1645

January 2, 2002



UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office  
COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

| SERIAL NUMBER | FILING DATE | FIRST NAMED APPLICANT | ATTORNEY DOCKET NO. |
|---------------|-------------|-----------------------|---------------------|
|               |             |                       |                     |

| EXAMINER                |              |
|-------------------------|--------------|
| Rodney P. Swartz, Ph.D. |              |
| ART UNIT                | PAPER NUMBER |
|                         | 1645         |

DATE MAILED:

**Please find below a communication from the EXAMINER in charge of this application**

Commissioner of Patents

This Application contains sequence disclosures that are encompassed by the definitions for nucleotide and/or amino acid sequences set forth in 37 C.F.R. § 1.821(a)(1) and (a)(2). However, this application fails to comply with the requirements of 37 CFR §§ 1.821 - 1.825 for the reason(s) set forth on the attached Notice To Comply With Requirements For Patent Applications Containing Nucleotide Sequences And/Or Amino Acid Sequence Disclosures.

Any inquiry concerning this communication should be directed to Examiner Rodney P. Swartz, Ph.D., Art Unit 1645, whose telephone number is (703) 308-4244. If unable to reach the examiner, Lynette Smith, SPE, can be contacted at (703) 308-3909.

Any questions regarding compliance with the sequence rules requirements specifically should be directed to the departments listed at the bottom of the Notice To Comply.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0196.

APPLICANT IS GIVEN ONE MONTH FROM THE DATE OF THIS LETTER WITHIN WHICH TO COMPLY WITH THE SEQUENCE RULES, 37 C.F.R. §§ 1.821 - 1.825. Failure to comply with these requirements will result in ABANDONMENT of the application under 37 C.F.R. § 1.821(g). Extensions of time may be obtained by filing a petition accompanied by the extension fee under the provisions of 37 C.F.R. § 1.136. In no case may an applicant extend the period for response beyond the six month statutory period. Direct the response to the undersigned. Applicant is requested to return a copy of the attached Notice to Comply with the response.

Rodney P. Swartz, Ph.D.

January 2, 2002

**NOTICE TO COMPLY WITH REQUIREMENTS FOR PATENT APPLICATIONS CONTAINING NUCLEOTIDE SEQUENCE AND/OR AMINO ACID SEQUENCE DISCLOSURES**

The nucleotide and/or amino acid sequence disclosure contained in this application does not comply with the requirements for such a disclosure as set forth in 37 CAR §1.821 - §1.825 for the following reason(s):

- 1. This application clearly fails to comply with the requirements of 37 CAR §1.821 - §1.825. Applicant's attention is directed to these regulations, published at 1114 OG 29, May 15, 1990, and at 55 FR 18230, May 1, 1990.
- 2. This application does not contain, as a separate part of the disclosure on paper copy, a "Sequence Listing" as required by 37 CAR §1.821(c).
- 3. A copy of the "Sequence Listing" in computer readable form has not been submitted as required by 37 CAR §1.821(e).
- 4. A copy of the "Sequence Listing" in computer readable form has been submitted. However, the content of the computer readable form does not comply with the requirements of 37 CAR §1.822 and/or §1.823, as indicated on the attached copy of the marked-up "Raw Sequence Listing".
- 5. The computer readable form that has been filed with this application has been found to be damaged and/or unreadable as indicated on the attached CRF Diskette Problem Report. A substitute computer readable form must be submitted as required by 37 CAR §1.825(d).
- 6. The paper copy of the "Sequence Listing" is not the same as the computer readable form of the "Sequence Listing" as required by 37 CAR §1.821(e).
- 7. Other: \_\_\_\_\_

**APPLICANT MUST PROVIDE:**

- An initial or substitute computer readable form (CRF) copy of the "Sequence Listing".
- An initial or substitute paper copy of the "Sequence Listing", as were as an amendment directing its entry into the specification.
- A statement that the content of the paper and computer readable copies are the same and, where applicable, include no new matter, as required by 37 CAR §1.821(e) or §1.821(f) or §1.821(g) or §1.825(b) or §1.825(d).

**FOR QUESTIONS REGARDING COMPLIANCE WITH THESE REQUIREMENTS, PLEASE CONTACT:**

For Rules Interpretation, call (703) 308-1123  
For CRF Submission help, call (703)308-4212  
For Patentin Software help, call (703) 557-0400

**PLEASE RETURN A COPY OF THIS NOTICE WITH YOUR RESPONSE.**